

PAT-NO: JP360213902A  
DOCUMENT-IDENTIFIER: JP **60213902** A  
TITLE: SYNTHETIC RESIN LENS

PUBN-DATE: October 26, 1985

**INVENTOR-INFORMATION:**

NAME	COUNTRY
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NAKAJIMA, MIKITO	
MOGAMI, TAKAO	

**ASSIGNEE-INFORMATION:**

NAME	COUNTRY
SEIKO EPSON CORP	N/A

APPL-NO: JP59071171

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INT-CL (IPC): G02B001/10 , C08J007/04 , C09D003/82 , G02B001/04

US-CL-CURRENT: 428/412 , 428/447

**ABSTRACT:**

PURPOSE: To improve the resistance to wear, hot water and chemicals, the dyeability, the weatherability, etc. by forming films consisting of specific compsn. on the surface of a synthetic resin lens.

CONSTITUTION: The film consisting essentially of A) 1 or  $\geq 2$  kinds among the org. Si compds. expressed by the formula I (R1 is hydrocarbon group of 1-6C, org. group having vinyl, methacryloxy, amino, mercapto or epoxy group, R2 is hydrocarbon group of 1-4C, R3 is hydrocarbon group of 1-5C, acyl or alkoxylalkyl group, H, etc. a is 0-1), B) the org. Si compd. expressed by the formula II (R4 and R5 are same or variant hydrocarbon groups of 1-4C, acyl or alkoxylalkyl group or H, R6 and R7 are org. group having same or variant hydrocarbon group of 1-6C, vinyl, methacryloxy, amino, mercapto or epoxy group, X is bivalent org. group contg. bivalent hydrocarbon group, O or S, b and c are 0-1), C) colloidal silica having 1-100 $\mu$ m drain size, D)  $\geq 1$  kinds of a multifunctional epoxy compd. and polyhydric alcohol, E)  $MgClO_4$  is formed on the surface of the synthetic resin lens. The component B among such film components is easily condensatable with the component A or C and has the long bond length and can be therefore a part of the dyeability components. The amt. of the component C to be added which is the other dyeability component is thus minimized. The condensation or polymn. of the components A, B and C is made perfect by the curing catalyst component D and the compsn. is used for a lens of automotive parts, etc.

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DERWENT- 1985-312765  
ACC-NO:

DERWENT- 198550  
WEEK:

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TITLE: Abrasion-, chemical-, weather- and hot water resistant plastic lens - by coated compsn.contg. organo silicone cpds., colloidal silica, epoxy cpds. and/or polyhydric alcohol(s), and magnesium perchlorate

PATENT-ASSIGNEE: SUWA SEIKOSHA KK[SUWA]

PRIORITY-DATA: 1984JP-0071171 (April 10, 1984)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 60213902	A October 26, 1985	N/A	006	N/A

INT-CL (IPC): C08J007/04, C09D003/82, G02B001/10

ABSTRACTED-PUB-NO: JP 60213902A

**BASIC-ABSTRACT:**

Surface of plastic lens is coated with a plastic coating composed mainly of (a) at least one organosilicon cpd. of formula (I), (b) organosilicon cpd. of formula (II), (c) colloidal silica of particle size 1 to 100 microns, (d) at least one of polyepoxy cpds and polyhydric alcohols, and (e) magnesium perchlorate.

R1 is organic gp containing 1-6C hydrocarbon, vinyl, methacryloxy, amino, mercapto or epoxy unit; R2 is 1-4C hydrocarbon gp; each of R3, R4 and R5 is 1-5C hydrocarbon, acyl or alkoxyalkyl, or H; each of R6 and R7 is organic gps. contg. 1-6C hydrocarbon, vinyl, methacryloxy, amino, mercapto or epoxy unit; X is bivalent hydrocarbon gp or bivalent organic gp contg. oxygen or sulphur atom; and each of a, b and c is 0 or 1.

ADVANTAGE - The organic coating improves abrasion resistance, chemical resistance, hot water resistance, weather resistance, etc., combined with stable dyeability.

CHOSEN- Dwg.0/0  
DRAWING:

TITLE- ABRASION CHEMICAL WEATHER HOT WATER RESISTANCE PLASTIC LENS COATING  
TERMS: COMPOSITION CONTAIN ORGANO SILICONE COMPOUND COLLOID SILICA EPOXY  
COMPOUND POLY HYDRIC ALCOHOL MAGNESIUM PERCHLORATE

DERWENT-CLASS: A26 A89 G02 P81

CPI-CODES: A06-A00E1; A12-B07; A12-L02A; G02-A05;

UNLINKED-DERWENT-REGISTRY-NUMBERS: ; 1694U

**POLYMER-MULTIPUNCH-CODES-AND-KEY-SERIALS:**

Key Serials: 0004 0037 0202 0203 0205 0211 0218 0222 0057 0231 1282 1304 1305 1306  
1971 2020 2148 2152 2218 2300 2307 2432 2437 2600 2605 2607 2609 2657  
3252 2660 2669 2726 2765 3310

Multipunch 014 038 04- 040 05- 06- 075 15- 18& 226 229 231 303 308 310 311 331  
Codes: 334 341 344 346 38- 42- 43& 431 438 443 473 477 48- 504 54& 541 543  
545 546 549 55- 57& 597 598 600 601 645 649 721

**SECONDARY-ACC-NO:**

CPI Secondary Accession Numbers: C1985-135008

Non-CPI Secondary Accession Numbers: N1985-232166